

# **BIRDS AT ARMS**

## **DESIGN DOCUMENT OVERVIEW**

**A GAME BY ETHAN SHIMOOKA - MOBA - (INNOVATION IN EXISTING GENRE)**

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**\*\*PRELIMINARY REVISION - ALL CONTENTS SUBJECT TO CHANGE  
PREFACE / INTRODUCTION**

The concept for this game draws inspiration from numerous multiplayer games across different platforms, but was primarily influenced by Splatoon (Nintendo Wii U) and League of Legends (Riot games, Wii U), as well as SOLDAT (Independent, PC). In the case of the first two, teamwork is the most essential game component, as neither team in Splatoon or League of Legends can hope to win on the skill of a single player. The principle that a few less skilled but coordinated players can overpower a team where the skill level is distributed unevenly is at the core of the modern MOBA.

Traditionally, a MOBA is a game played across multiple player lanes, up to a hundred classes, and requires an exceptional time commitment, both to learn the game and to play a match, which can last anywhere from thirty minutes to an hour depending on the skill of the team and the particular game. These games often include items in which a player spends the first half of the game “farming”, repetitively killing neutrals, in return for currency and experience. The items can be built and bought with the currency, and different combinations for different heroes can be referred to as player “builds”. Experience points typically allow the player level to increase, which grants new skills the players keep for the duration of the game.

The laning phase of a MOBA consists of either “farming”, “pushing” the neutrals to the other team's base, or sneaking into another game lane to overpower, or “gank” the other team's lane player. Between in-lane strategies, item builds, and skill trees, MOBAs are typically the games with the highest skill curve, but also have arguably the highest replay-value of any game genre.

## **CONCEPT**

Birds-At Arms (BAA) at its core, is a 2D simplification of the lane-based multiplayer online battle arena (MOBA), that can be played casually in about 4 minutes. The aim of Birds-At-Arms is to provide the addictive compelling experience of a MOBA at the casual level, so that it can be enjoyed by everyone, not just the “hardcore” game audience. In order to make the game more accessible, the skilltree and item mechanics have not been included. Skillshot mechanics have been introduced to keep the element of skill in the game, and a series of platforms and a shield switches have allowed for nascent team strategy. The game takes place on a series of platforms in a side-view 2D plane of view. The platforms are floating in space, much like the game “Super Smash Bros”, and feature two “player only” platforms and one lane where the neutrals spawn.

## **IV. STORY**

Although the game will not intentionally address plot points, the plot of the game can be as followed:

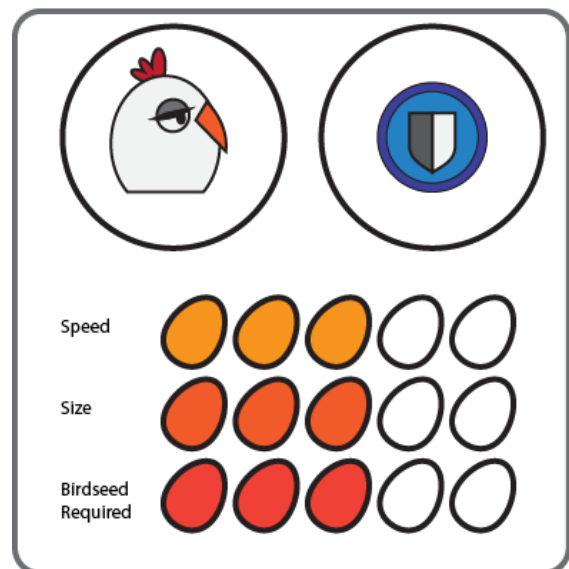
The story will of course be non-essential, and the game will be rated E-10.

## V. CLASSES

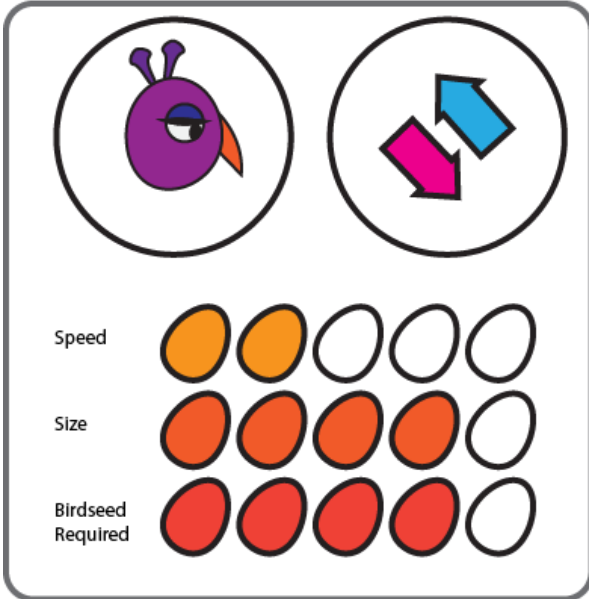
There are a total of 6 classes planned for the initial release of Birds-At-Arms. All classes are not initially available to the player, and must play a game with the first class in order to unlock the next class. The first class has no specific strengths and no particular weaknesses in order to build familiarity with the subsequent classes. This also adds immediate replay value and prevents the user from being overwhelmed. They all vary in movement speed, feather size, and the amount of birdseed required. The birds are also all different sizes.

### 1. CHICKEN CLASS

The chicken class is the playable class and default class. The chicken is neither the quickest or the slowest, and is intended to fill any role on the team. The chickens class power is an external shield. The shield projects in front of the schicken avatar and is large enough to cover 2 other players. The player is allowed to fire through the shield. It charges up fairly fast.



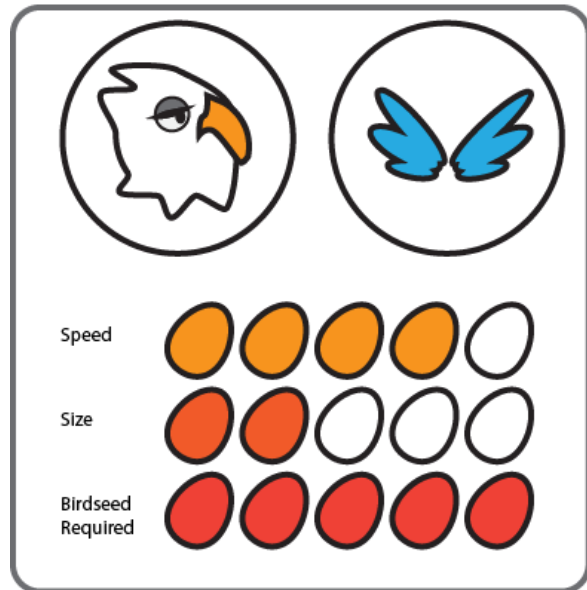
## 2. PEACOCK CLASS



The Peacock class is the second class that is unlocked. It is unlocked after your first match. The peacocks primary ability shoots a feather that is much wider than the chicken, though it walks much slower. The peacocks class power is team control inversion. Meaning the other team's controls are reversed for 10 seconds.

## 3. EAGLE CLASS

The Eagle class is the third class unlocked, The eagle's primary feather is a tad bit smaller than that of the chickens. The eagle class's special ability is a The ability to throw its arms in a boomerang style fashion across the map. The arms clear any thing in its path.

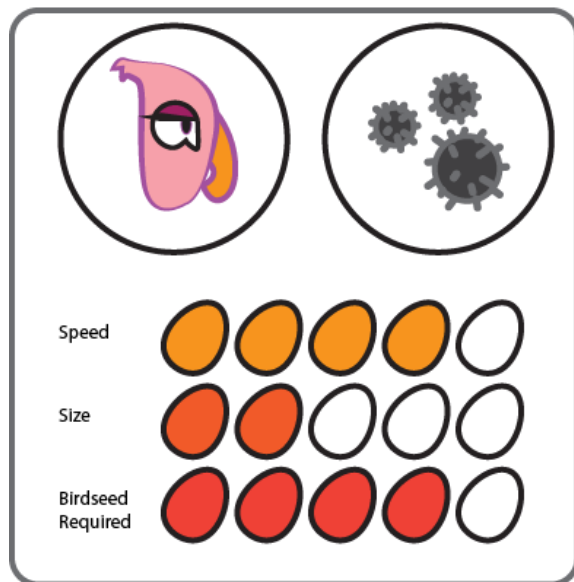


## 4. TURKEY CLASS

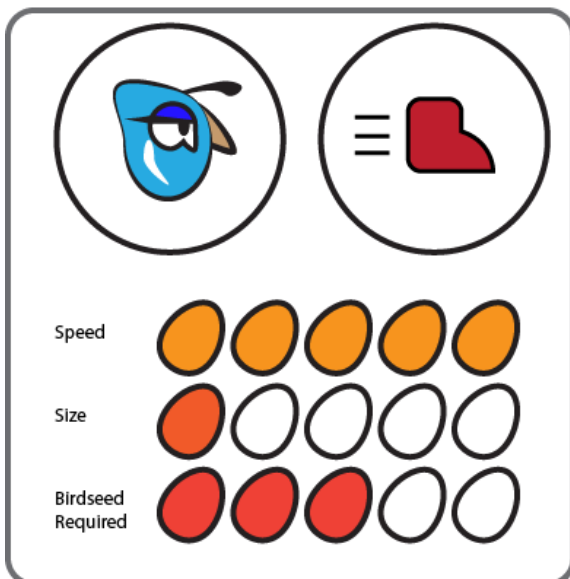
The Turkey Class is the slowest class in the game. The player's avatar is also the largest, with the largest hit box as well. However, its primary feather splits into two additional feathers before reaching its target. The turkey's class power is a controllable super minion that spawns on the middle platform. The turkey enters a state of hibernation when it remotely controls the minion.

## 5. FLAMINGO CLASS

The Flamingo Class is a support class. While the flamingo is nimble and narrow, it lacks a fast primary attack. It can toss plastic lawn flamingo mines. Up to 4 mines may be planted.



## 6. QUAIL CLASS



The Quail Class is the smallest and most nimble class in the game. It's primary attack is a tiny feather that is also the fastest. The quails ability grants insane speed that can be a huge benefit for defending a base.

## **VI. LEVEL AND STAGE DESIGN**

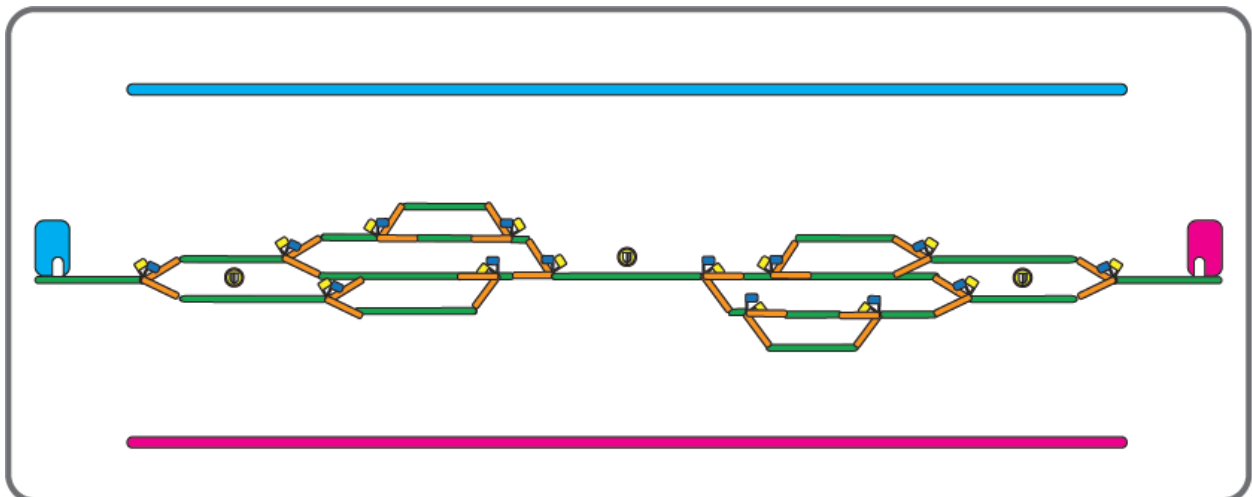
In a traditional lane-based MOBA, the playing field typically contains 3 lanes, and the members of each team decide on a lane to inhabit. This is how the player acquire experience to level up their characters. Birds-At-Arms does not possess a level or EXP system, and would not benefit from multiple lanes. Further, since players can only attack by projectiles, melee combat is not permitted, which means sneak attacks from other lanes would be meaningless, and thus a non essential part of the game.

### **1. TEAM PLATFORM**

Each team spawns and with the exception of the eagle class, remains on the team platform for the duration of the game.

### **2. MIDLANE DESIGN**

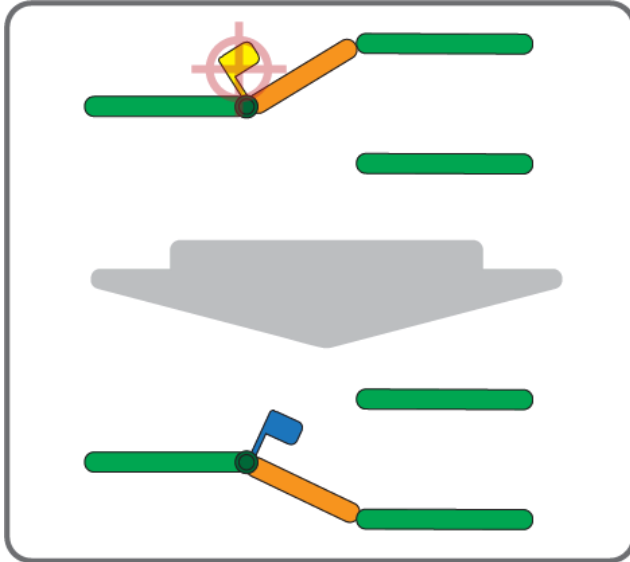
The primary feature of the midlane is to host the teams respective bases and neutrals at each end of the platform.



### **3. SWITCHES.**

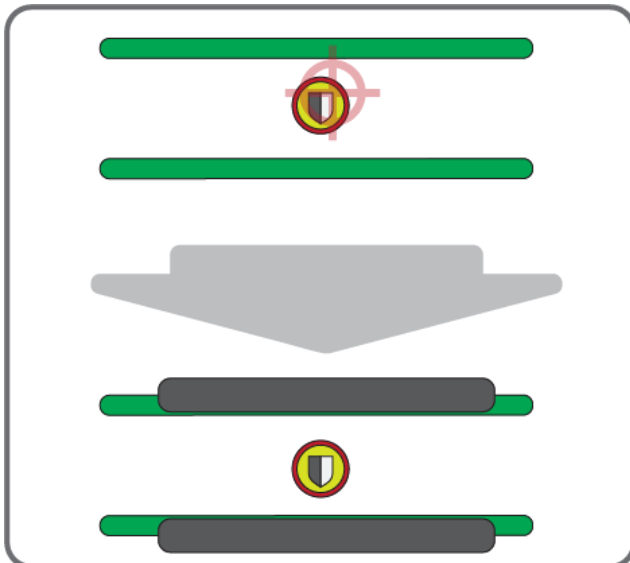


Birds-At-Arms features two midlane switches that can be toggled with a primary attack. The purpose of switches is to modify gameplay from just being a simple game of tug-of-war, and introduces opportunity for more elaborate team strategy.



### **I. PLATFORM SWITCHES.**

The bases are positioned at each end, and in between, the main lane is comprised of intermediate switches as pictured to the left. This allows the team to actively determine which route a creep takes, and allows for two creeps to not touch and subsequently attack each other. It also forces the players on each team to occupy different areas of the player platform. There is a cooldown period for the platform switch of about 1 second.



### **II. SHIELD SWITCHES**

The shield switch is designed to be toggled by either team. When toggled, the shield switch activates a barricade on both the ground and air above it, stopping projectiles from passing through. There is a cooldown period for the shield switch of about 30 seconds.

## **VII. GAMEPLAY**

### **1. SETUP LOBBY**

From the main menu, the players enter the game lobby, where players confirm they are ready. Once all player are confirmed to be ready, the character select process begins. Players have 30 seconds to choose a class. After each teams choices have been made, the players spawn on their respective teams platform, at which point, the game will count down from 5 to begin.

### **2. GAME FLOW**

Players have approximately four minutes of play time. The first wave of neutrals spawn at the 5 second mark. Afterward, neutrals spawn in 7 second intervals. Players can target either neutrals, or they can target players. The speed of the primary attack is determined by the length of holding down the controller trigger.

### **3. WIN CONDITIONS**

The game ends when Time runs out, or when the enemies base is destroyed by the other teams neutral. The base can take 4 creeps before it will be destroyed completely, ending the game.

### **4. PRIMARY ATTACK**

The size of the primary attack is determined by each character class, as well as special effects once the feather the player shoots reaches the crosshair. To fire a feather, the player takes aim with the crosshair, and then begins to charge by holding down the left trigger. The longer the trigger is held, the faster the feather will travel to the target.

### **5. BIRDSEED**

Birdseed is collected each time a neutral is killed. Birdseed is also awarded each time a player is disabled. 1x birdseed is awarded for a neutral kill. 5x for a player disable. Filling up the bird seed meter will allow the player to use their class power.

### **6. PLAYER DISABLING**

When a player is hit with a feather, they become disabled. That means they turn into an egg and are returned (roll) to the center of their player platform for 10 seconds.

## 6. CLASS POWER

Each class has a variable amount of bird seed required to deploy their special class power, depending on their class. When enough birdseed is collected, the class power can be activated by pressing the appropriate button. When the power is activated, the player will be unable to collect additional birdseed for the duration of the power.

## 7. PLAYER DEATH / EGGS / INCUBATOR

When a player is hit, he turns into an egg and rolls towards the spawn point located at the endpoints of each player platform. While rolling, the enemy team can hit the egg with feathers, which slows the player down, and increase time to spawn.

## 8. NEUTRALS

Team neutrals spawn from bases and proceed in one direction across the lane to the othersides base. They can be destroyed with a feather from the opposing team, or if they collide with another team neutral.

## 9. BASES.

Each team posses a base at opposing ends of the mid platform. It can be destroyed by allowing 5 enemy neutrals to enter the base. Bases also are responsible for spawning team neutrals. One neutral is spawned every 7 seconds after the initial duration of 5 seconds.

## 10. CONTROLS



## **VIII. ART**

Hand drawn animation and character assets are required for all player avatars and team neutrals. Simple yet recognizable player models will be used, and each one designed with visual distinction in mind. For the player avatar, there will be sections of each sprite that contain alpha channel.

## **IX. SOUND DESIGN**

The sound design for Birds-At-Arms will feature melodic and farm inspired music that will be composed for the game. Namely a kazoo. The kazoo as an instrument is exceptionally important. There will be a main menu theme, a character select theme, and a main game theme. The sound effects will be recorded for each character class. A sound effect will play for each of the following actions:

PLAYER	Environment
Jump	Neutral spawn
Charging Primary	Neutral death
Firing Primary	Neutral attack
Successful Hit	Base destruction
Game Win	base attack
Game Lose	Power activation
Player death	background sfx
Fully charged Primary	menu toggle

Environmental sound effects, as well as sound effects for each teams neutrals will also be required. This is merely a preliminary list

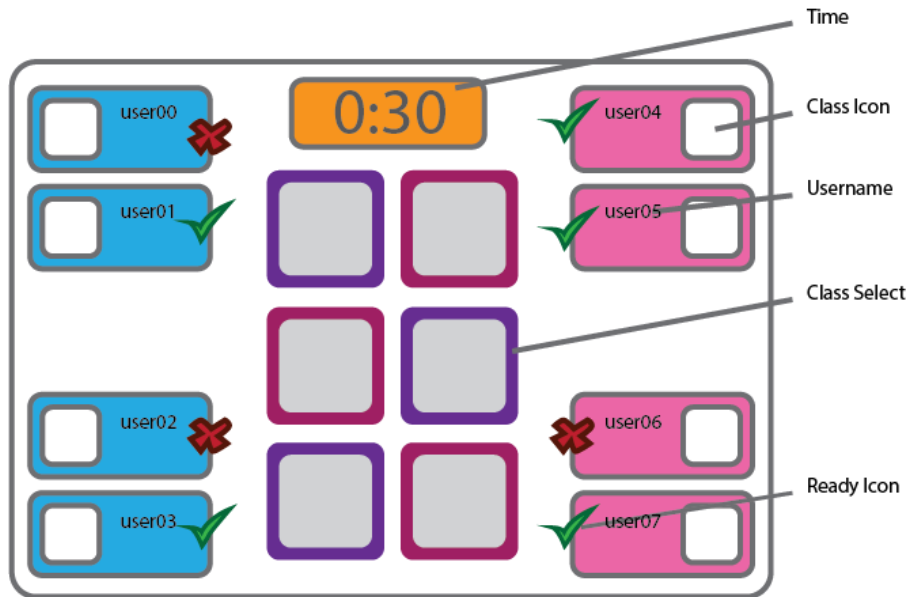
## **X. UI AND UX**

Birds-At-Arms features multiple game screens, including a character select screen that both teams can see. This is indicative of the MOBA genre, and allows a team to compose a team based on what the other team chooses.

## 1. MENU

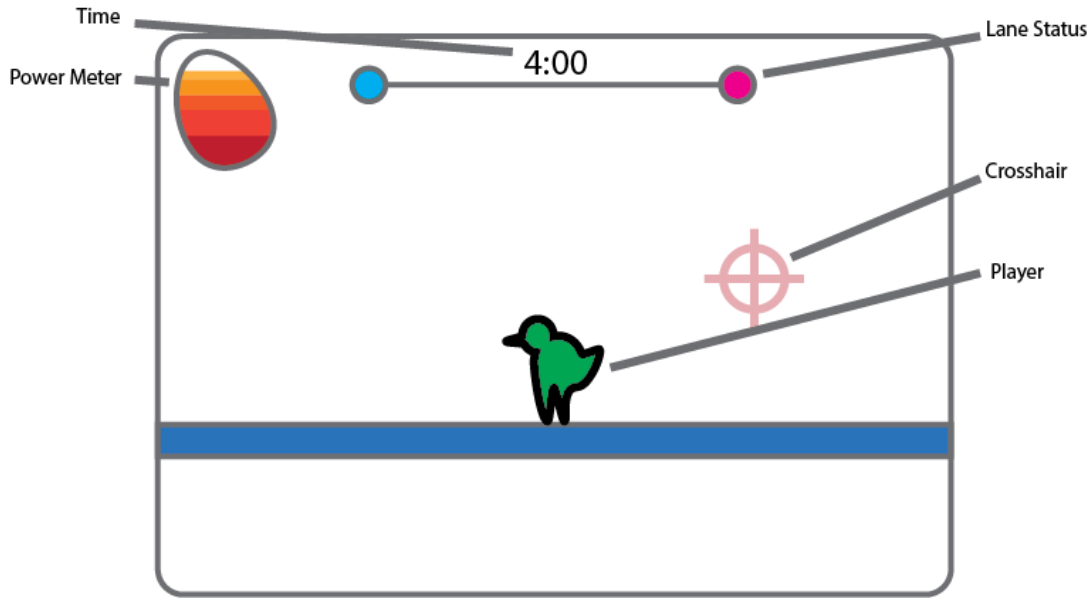
The main menu screen contains the option to find a game via IP address (Network) or by Local (LAN). It will also offer the option to tweak graphic and audio settings.

## 2. GAME LOBBY / CHARACTER SELECT SCREEN



The main lobby screen displays each member of the team on either side of the screen. Right next to their desired username, they have a space for their class icon. Each player has a “ready” button next to their username, the character select menu pops up once all team members have readied. The classes are spread out into a 2x3 grid.

## 3. GAME SCREEN



The main game screen has a few elements worth noting. The Lane Status bar provides a map relative to the midlane of how close the neutrals are of BOTH teams to the respective bases. The main camera follows the crosshair and moves on the x-axis. Both sides are constrained to each side of the map.

## **XI. PLATFORM**

Birds-At-Arms will be compiled and released for windows and linux, using the Simple DirectMedia Library 2.0 (SDL), the game programming will be done in C++, and ideally will be released with full Steam Integration.

## **XII. GOALS**

Assuming the game is complete and everything looks good, there are a few stretch goals that will enhance the experience of the game. The benefit of the MOBA genre is that additional content can be easily added, and ideally after the initial game is released, more classes can be introduced fairly simply. Matchmaking and player ranking are two other server side features that are essential for a successful MOBA.